

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A cardiac implant comprising:
 - (a) a scaffold defining an open interior volume, an open first end, and an opposite open second end;
 - (i) said open interior volume comprising a blood flow conduit to direct blood flow through the scaffold including through the open first end and the open second end;
 - (ii) said scaffold having an exterior surface and an opposite, interior surface;
 - (A) said interior surface lining said open, interior volume;
 - (b) a first therapeutic agent in at least partial covering relation to at least a first portion of one of said exterior surface and said interior surface; and
 - (c) a second therapeutic agent, different from said first therapeutic agent, in at least partial covering relation to at least a second portion of one of said exterior surface and said interior surface,
wherein said first therapeutic agent is not in covering relation to the second
portion.
2. (Original) An implant according to claim 1 wherein:

(a) said first therapeutic agent comprises one of a therapeutic agent selected from the group consisting essentially of: anti-thrombotic agents, anti-inflammatory agents, anti-proliferative agents, antibiotic agents, angiogenic agents, anti-platelet agents, anti-coagulant agents, restenosis preventing agents, hormones, and combinations thereof.

3. (Original) An implant according to claim 2 wherein:

(a) said second therapeutic agent comprises one of a therapeutic agent selected from the group consisting essentially of: anti-thrombotic, anti-inflammatory, anti-proliferative, antibiotics, angiogenic, anti-platelet agents, anti-coagulant agents, hormones, and combinations thereof.

4. (Original) An implant according to claim 1 wherein:

(a) said first therapeutic agent is in covering relation to selected zones on at least one of said exterior surface and said interior surface.

5. (Original) An implant according to claim 4 wherein:

(a) said second therapeutic agent is in covering relation to selected zones, at locations different from said first therapeutic agent, on at least one of said exterior surface and said interior surface.

6. (Original) An implant according to claim 5 wherein:

(a) said open first end comprises a blood inflow end;

(b) said first selected zones includes an inlet zone on at least one of said exterior surface and said interior surface adjacent to said blood inflow end; and

(c) one of said first therapeutic agent and said second therapeutic agent is in covering relation to said inlet zone.

7. (Original) An implant according to claim 6 wherein:

(a) said inlet zone extends from said open first end along said scaffold a distance no greater than 0.5 inch.

8. (Original) An implant according to claim 7 wherein:

(a) said open second end comprises a blood outflow end;

(b) said selected zones includes an outlet zone on at least one of said exterior surface and said interior surface adjacent to said blood outflow end; and

(c) one of said first therapeutic agent and said second therapeutic agent is in covering relation to said outlet zone.

9. (Original) An implant according to claim 8 wherein:

(a) said outlet zone extends from said open second end along said scaffold a distance no greater than 3.75 inches.

10. (Original) An implant according to claim 9 wherein:

(a) said inlet zone includes an inlet exterior zone on said exterior surface and an inlet interior zone on said interior surface.

11. (Original) An implant according to claim 10 wherein:

(a) said outlet zone includes an outlet exterior zone on said exterior surface and an outlet interior zone on said interior surface.

12. (Original) An implant according to claim 11 wherein:

(a) said selected zones includes at least one mid-zone between said inlet zone and said outlet zone.

13. (Original) An implant according to claim 12 wherein:

(a) said mid-zone includes a plurality of mid-zones between said inlet zone and said outlet zone.

14. (Original) An implant according to claim 12 wherein:

(a) said mid-zone includes a mid-exterior zone on said exterior surface and a mid-interior zone on said interior surface.

15. (Original) An implant according to claim 11 wherein:

(a) said inlet exterior zone is at least partially covered with one of said first therapeutic agent and said second therapeutic agent comprising one from the group consisting essentially of: antiproliferative agents, anti-inflammatory agents, anti-platelet agents, anti-coagulant agents, and combinations thereof.

16. (Original) An implant according to claim 15 wherein:

(a) said antiproliferative agents include at least one of: paclitaxel; taxol; sirolimus; napamycin; actinomycinD; anti PDGF antibodies; .lambda.or .beta.radiation; and nitric oxide;

(b) said anti-inflammatory agents include at least one of: non-steroids and steroids;

(c) said anti-platelet agents include at least one of: aspirin, iclopidine; clopidogrel; dipyridamole; gpIIbIIIa antibodies; and nitric oxide; and (d) said anti-coagulant agents include at least one of: heparin; low MW heparin, hirudin; mitric acid; hirulog; and annexin II.

17. (Original) An implant according to claim 11 wherein:

(a) said inlet interior zone is at least partially covered with one of said first therapeutic agent and said second therapeutic agent comprising one from the group consisting essentially of: antiproliferative agents, anti-inflammatory agents, anti-platelet agents, anti-coagulant agents, and combinations thereof.

18. (Original) An implant according to claim 17 wherein:

(a) said antiproliferative agents include at least one of: paclitaxel; taxol; sirolimus; napamycin; actinomycinD; anti PDGF antibodies; .lambda.or .beta. radiation; and nitric oxide;

(b) said anti-inflammatory agents include at least one of: non-steroids and steroids;

(c) said anti-platelet agents include at least one of: aspirin, iclopidine; clopidogrel; dipyridamole; gpIIbIIIa antibodies; and nitric oxide; (d) said anti-coagulant agents

include at least one of: heparin; low MW heparin, hirudin; nitric acid; hirulog; and annexin II.

19. (Original) An implant according to claim 11 wherein:

(a) said outlet interior zone is at least partially covered with one of said first therapeutic agent and said second therapeutic agent comprising one from the group consisting essentially of: restenosis preventing agents, anti-thrombotic agents, anti-biotic agents, antiproliferative agents, anti-platelet agents, anti-coagulant agents, hormones, and combinations thereof.

20. (Original) An implant according to claim 17 wherein:

(a) said antithrombotic agents include at least one of: streptokinase; Tpa; and urokinase;

(b) said antibiotic agents include at least one of: silver; silver combined with Pb, Pt, Au; silver oxide; heavy metals; vancomycin; and rifampin;

(c) said antiproliferative agents include at least one of: paclitaxel; taxol; sirolimus; rapamycin; actinomycinD; anti PDGF antibodies; .lambda.or .beta.radiation; and nitric oxide;

(d) said anti-platelet agents include at least one of: aspirin, ticlopidine; clopidogrel; dipyridamole; gpIIb/IIIa antibodies; and nitric oxide;

(e) said anti-coagulant agents include at least one of: heparin; low MW heparin, hirudin; nitric acid; hirulog; and annexin II; and

(f) said hormones includes at least one of: estrogen.

21. (Original) An implant according to claim 11 wherein:

(a) said outlet exterior zone is at least partially covered with one of said first therapeutic agent and said second therapeutic agent comprising one from the group consisting essentially of: anti-thrombotic agents, anti-biotic agents, antiproliferative agents, anti-platelet agents, anti-coagulant agents, hormones, and combinations thereof.

22. (Original) An implant according to claim 21 wherein:

(a) said antithrombotic agents include at least one of: streptokinase; Tpa; and urokinase;

(b) said antibiotic agents include at least one of: silver; silver combined with Pb, Pt, Au; silver oxide; heavy metals; vancomycin; and rifampin;

(c) said antiproliferative agents include at least one of: paclitaxel; taxol; sirolimus; napamycin; actinomycind; anti PDGF antibodies; .lambda.or .beta. radiation; and nitric oxide;

(d) said anti-platelet agents include at least one of: aspirin, iclopidine; clopidogrel; dipyridamole; gpIIb/IIIa antibodies; and nitric oxide;

(e) said anti-coagulant agents include at least one of: heparin; low MW heparin, hirudin; mitric acid; hirulog; and annexin II; and

(f) said hormones includes at least one of: estrogen.

23. (Original) An implant according to claim 11 wherein: (a) said scaffold is L-shaped.

24. (Original) An implant according to claim 23 wherein:

(a) said scaffold defines a first portion dimensioned to extend through a myocardium and into a heart chamber, and a second portion dimensioned to be in blood flow communication with a coronary vasculature;

(i) said first portion defining said open first end; and

(ii) said second portion defining said open second end.

25. (Original) An implant according to claim 24 further including:

(a) a cuff circumscribing a section of said first portion; said cuff including at least one of cell adhesion agents and growth agents.

26. (Original) An implant according to claim 24 wherein:

(a) said second portion includes a permeable mesh section defining said open second end.

27. (Original) An implant according to claim 24 wherein:

(a) said scaffold includes a plurality of rings circumscribing at least a partial section of said second portion.

28. (Original) An implant according to claim 11 wherein:

(a) said scaffold is straight and bend-free between said open first end and said open second end.

29. (Original) An implant according to claim 28 wherein:

(a) said scaffold is tapered between said open first end and said open second end at an angle of between 0.05-0.25.degree.

30. (Original) An implant according to claim 28 wherein:

(a) said scaffold further includes a covering thereon.

31. (Currently Amended) A method for making a cardiac implant for establishing a blood flow path through a myocardium between a heart chamber and a lumen of a coronary vessel residing at an exterior of the myocardium; the method comprising:

(a) providing a scaffold defining an open interior volume, an open first end, and an opposite open second end;

(b) covering at least a first portion of the scaffold with a first therapeutic agent, and

(c) covering at least a second portion of the scaffold, ~~different from the first portion,~~ with a second therapeutic agent, different from the first therapeutic agent, wherein said first therapeutic agent does not cover the second portion.

32. (Original) A method according to claim 31 wherein:

(a) said step of covering at least a first portion includes covering an interior surface adjacent to said open first end with a first therapeutic agent including one from the group consisting essentially of: anti-thrombotic agents, anti-biotic agents, antiproliferative agents, anti-platelet agents, anti-coagulant agents, hormones, and combinations thereof.

33. (Original) A method according to claim 32 wherein:

(a) said step of covering at least a first portion includes covering an exterior surface adjacent to the open first end with the first therapeutic agent.

34. (Original) A method according to claim 33 wherein:

(a) said step of covering at least a second portion includes covering an interior surface adjacent to said open second end with a second therapeutic agent including one from the group consisting essentially of: anti-thrombotic agents, anti-biotic agents, antiproliferative agents, anti-platelet agents, anti-coagulant agents, hormones, and combinations thereof.

35. (Original) A method according to claim 34 wherein:

(a) said step of covering at least a second portion includes covering an exterior surface adjacent to the open second end with the second therapeutic agent.

36. (Original) A method according to claim 31 wherein:

(a) said step of providing a scaffold includes providing an L-shaped scaffold.

37. (Original) A method according to claim 31 wherein:

(a) said step of providing a scaffold includes providing a straight, bend-free scaffold.

38. (Currently Amended) A method for performing a coronary vessel bypass procedure for supplementing a flow of blood to a coronary vessel; the method comprising:

(a) forming a blood flow path from a heart chamber directly to the coronary vessel at a site in the vessel positioned between an obstruction in the vessel and tissue of the heart to be supplied with blood by the vessel;

(i) the forming including placing a conduit in a heart wall between the chamber and the vessel with a first end of the conduit protruding into the chamber and protruding beyond an interior surface of the heart wall;

(ii) the conduit including a first therapeutic agent in covering relation to at least a first portion and a second therapeutic agent in covering relation to at least a second portion,

wherein the first therapeutic agent is not in covering relation to the second portion.